Serial No.: 10/009,127

GAU:

2611

AMENDMENTS TO THE SPECIFICATION:

Replace the paragraph at page 6, beginning at line 19, with the following amended paragraph:

The despread sample signal may be generated based on the equation

$$X(n) = \frac{1}{m} \sum_{k=1}^{m} r(k)$$

wherein m denotes the number of chips of the predetermined code period and is a value proportional to the minimum code length, k denotes a chip index of a spreading code of said received spectrum signal, r (k) denotes the value of a signal, obtained by removing said spreading code from said received spread spectrum signal, at said chip index k, and wherein X (n) denotes the value of said despread sample signal at a sample index n.

Replace the three paragraphs at page 7, beginning at line 1, with the following three amended paragraphs:

Furthermore, the expectation value may be obtained based on the equation

$$E(X) = \frac{1}{c/m} \sum_{n=1}^{c/m} X(n)$$

wherein c is a value proportional to denotes the spreading code length of said received spread spectrum signal, m denotes the number of chips of said predetermined code period and is a value proportional to the minimum code length, n denotes a sample index of said despread sample signal, and X (n) denotes the value of said despread sample signal at the sample index n.

Furthermore, the mean power of the despread sample signal may be obtained based on the equation

$$E(|X|^2) = \frac{1}{c/m} \sum_{n=1}^{c/m} |X(n)|^2$$

wherein c denotes the spreading code length of said received spread spectrum signal, c is a value

Serial No.: 10/009,127 GAU: 2611

proportional to the spreading code length of said received spread spectrum signal, m denotes the number of chips of said predetermined code period and is a value proportional to the minimum code length, n denotes a sample index of said despread sample signal, and X (n) denotes the value of said despread sample signal at the sample index n.

Preferably, the interference estimation may be obtained based on the equation

$$\hat{I} = m \frac{c+m}{c} \cdot \frac{1}{N} \sum_{i=1}^{N} I(i)$$

wherein I denotes the interference estimate, m denotes the number of chips of said predetermined code period, N denotes the number of averaged symbols of said received spread spectrum signal, for which said variance estimation is performed.

Replace the paragraph at page 11, beginning at line 23, with the following amended paragraph:

Subsequently, the obtained signal is averaged over the code length of the shortest spreading code, i. e. the orthogonal code period of all spreading codes used in the WCDMA system. Thereby, a sample signal X (n) is obtained, which properly reflects the orthogonal components of the received signal components. The average may be obtained based on the following equation (1)

$$X(n) = \frac{1}{m} \sum_{k=1}^{m} r(k)$$

wherein m is a value proportional to denotes the length of the shortest code period in which the shortest code period is expressed by the number m of chips multiplied by the time duration τ of one chip of the spreading code, k denotes a chip index, n denotes an index of samples integrated over the shortest code length, and X (n) denotes a value of the obtained despread sample signal at the sample index n.

Replace the paragraph at page 13, beginning at line 14, with the following amended paragraph:

Serial No.: 10/009,127 GAU: 2611

The expectation value of the sample X and the mean power of samples of X used for calculating the interference estimate in stepS103 can be obtained from the following equations (5) and (6):

$$E(X) = \frac{1}{c/m} \sum_{n=1}^{c/m} X(n)$$

$$E(|X|^2) = \frac{1}{c/m} \sum_{n=1}^{c/m} |X(n)|^2$$

wherein c is a value proportional to denotes the length of the spreading code of the received control signal, i. e. control channel.

Replace the paragraph at page 14, beginning at line 25, with the following amended paragraph:

Then, the obtained signal from which the spreading code has been removed is supplied to a first integrator II which performs an integration over the shortest code length $\underline{m}\underline{r}$ $\underline{m}i$, wherein $\underline{T}\underline{r}$ denotes the time duration of one chip of the spreading code and \underline{m} denotes the number of chips of the predetermined code period for a shortest code length. At the output of the integrator II, a switch is provided which is closed at the timing $t + \underline{m}\underline{r}$, so as to perform a sample operation of the integrated output signal at the end of the integration period. The obtained despread sample signal is supplied to a second integrator I2 and a first squaring unit Q1 for obtaining a square of the absolute value of the sample signal.